From the Annals and Magazine of Natural History, Ser. 11, vol. vii. p. 129, February 1941.

Descriptions of new Species of Ants from New Guinea. By Horace Donisthorpe, F.Z.S., F.R.E.S., &c., Department of Entomology, British Museum (Natural History).

The following descriptions are based entirely upon the extensive collections brought back by Miss L. E. Cheesman from New Guinea. The material comes from both mountain and lowland country, and is derived from several expeditions. Considerable further material still remains to be examined, and this paper must therefore be regarded as preliminary in nature.

Subfamily Dorylinæ Leach.

Tribe ECITINI Forel.

Ænictus papuanus, sp. n.

\u2205. Brownish yellow, thorax brown, shining, clothed with fine yellow hairs.

Head unicolorous, smooth and shining, as long as broad, truncate posteriorly, rounded at sides, broadest before middle; mandibles narrow, armed with minute teeth at base, apical tooth long, curved, pointed, a shorter tooth preceding sharp and pointed; antennæ: scape only reaching a little beyond middle of head, funiculus with last three joints pubescent, joints 5-7 transverse,

last joint equal to the three preceding taken together. Thorax narrowed to base; pronotum rugose anteriorly, anterior angles rounded but distinct, smooth and shining posteriorly; mesonotum and epinotum rugosely punctured, the puncturation taking the form of small round, raised, shining spots, sides of the same rugosely longitudinally striate; epinotum with posterior angles pointed, declivity abrupt, concave. Petiole and postpetiole with similar puncturation to that of mesonotum and epinotum; petiole armed with a blunt tooth beneath anteriorly projecting forward; postpetiole with a smaller sharp pointed tooth; gaster long, oval, smooth and shining. Legs long, femora strongly incrassate; tibiæ considerably less so.

Long. 2.6 mm.

Type in B.M. Coll.

Described from a number of workers taken by Miss L. E. Cheesman, Papua, Mafulu, Wharton Range, 4000 ft., xii. 1933, no. 556. The ants' nest occurred in the crevice of a stone.

The worker of only one species of *Enictus*, *E. currax* Emery, has been described from NewGuinea. *E. papuanus* differs from it in the length of the joints of the antennæ, sculpture, colour of head, etc., and is also much smaller. It may possibly be the worker of one of the two species, the males of which have been described from New Guinea.

# Subfamily PONERINE Lepeletier.

# Tribe PONERINI Forel.

#### Ponera sabronæ, sp. n.

Head without mandibles about as broad as long, rounded at sides, broadest a little before the middle, slightly excised posteriorly; mandibles long, curved, crossed at apex when closed, masticatory border armed with seven or eight teeth, the three apical ones being the longest and sharpest; clypeus narrow, slightly advanced in centre, anteriorly raised, but not carinate

posteriorly; eyes not close to articulations of the mandibles, consisting of about 10-13 facets; frontal furrow distinct but not extending beyond two-thirds of the head; antennæ: scape reaching slightly beyond posterior border of head, funiculus gradually thickened to apex, all joints except first and last transverse, club not thick nor very distinct, consisting of five joints. Thorax narrowed to base; pronotum large, convex, transverse, rounded in front and at sides, pro-mesonotal suture very distinct; mesonotum round, convex, small, much narrower than pronotum, very distinctly defined; the episternum of mesothorax is separated from the sternum by a faint but distinct suture; epinotum not sharply narrow along dorsal surface, declivity not abrupt, longer than dorsum. and with sides margined. Scale of petiole high, not thick, narrowed to apex, bluntly rounded above, posterior surface slightly concave, anterior surface straight; gaster fairly long and pointed. Sting strong. Legs fairly long.

Long. 3.7 mm.

The worker is somewhat like that of *mocaryi* Emery, but is larger, far less pubescent, there are more facets to the eyes, and the episternum of mesothorax is much more distinct.

3. Typical *Ponera* male. Brownish yellow, first joint of funiculus of antennæ, mandibles, and margins of segments of gaster white.

Head round; mandibles somewhat rudimentary; clypeus convex, rounded anteriorly, sharply carinate, eyes large, oval; frontal furrow deep, reaching median ocellus; ocelli small; antennæ long; scape short; all joints of funiculus except the first longer than broad. Cerci very small but distinct. Genitalia moderate. Legs long and slender. Wings covered with very short dark hairs which give them a dusky appearance; pterostigma and veins brown.

Lony. 2.6 mm.

Described from four workers and one male taken by Miss L. E. Cheesman in a nest in rotten wood, Dutch New Guinea, Cyclops Mts., Sabron, 2000 ft., vi. 1936.

Euponera (Mesoponera) robiginosa, sp. n.

Rusty red, extremely finely punctured, giving the insect a velvety appearance, clothed with delicate

pubescence forming a silvery sheen from different aspects; eyes, teeth of mandibles, and anterior and posterior borders of clypeus very narrowly black.

Head without mandibles a little longer than broad, sides and posterior angles rounded, posterior border very slightly emarginate and narrowly margined; mandibles long, narrow, curved, crossed at apex when closed. with a row of seven punctures along masticatory border, which is furnished with twelve somewhat irregular teeth. the apical one being long, curved, and pointed; clypeus narrow, advanced in centre of anterior border, narrowly margined and terminating in a small point, sinuate on each side, upper surface convex, ending posteriorly in a blunt point between frontal carinæ; frontal furrow short, deep anteriorly, shallow and narrow posteriorly; eyes large, rather flat, situated in front at sides of head; antennæ long, scape extending beyond posterior border of head by about one-tenth of its length; funiculus gradually thickened to apex, all the joints longer than broad, second joint longer than third, still longer than first, last joint pointed. Thorax long, narrowed posteriorly, pronotum robust, convex, with round anterior border and shoulders; pro-mesonotal suture semicircular: notum round, convex, considerably narrower than pronotum, meso-epinotal furrow deep, suture with very short longitudinal striæ; epinotum with dorsal surface slightly shorter than pro- and mesonotum taken together. declivity slanting, flattened, a little shorter than dorsal Scale of petiole robust, high, thick, rounded above, anterior surface almost straight, posterior surface slightly concave, armed beneath with a blunt tooth-like ridge; gaster long, ovate, anterior surface straight. rounded above; postpetiole broader than, and about the same length as, second segment. Sting long, strong. Legs long.

Long. 9 mm.

Type in B.M. Coll.

Described from a single worker taken by Miss L. E. Cheesman in Dutch New Guinea, Cyclops Mts., Sabron, 2000 ft., vi. 1936, no. 221, in dead leaves.

This beautiful and distinct ant is the first species of *Mesoponera* to be described from New Guinea.

#### Euponera (Mesoponera) pulchella, sp. n.

♥. Dark black-brown, middle of scapes, femora, and tibiæ light brown, mandibles, lobes of frontal carinæ, funiculi, rest of legs and antennæ, apex, part of underside, and sutures of segments of gaster yellow, eyes and apex of teeth of mandibles black, very finely and closely punctured, shining, clothed with a few scattered outstanding yellow hairs, chiefly on clypeus, on underside of mandibles, and at apex of gaster, and with excessively minute decumbent hairs giving a beautiful bluish sheen or reflection to the surface.

Head longer than broad, sides almost straight, shallowly emarginate posteriorly; clypeus shape as in robiginosa but more or less distinctly carinate; mandibles finely punctured, slightly longer, with teeth more developed; frontal furrow narrow, extending beyond the half of head; eyes small, round. Thorax somewhat narrower; pronotum not so robust nor rounded, with a faint central carina; epinotum with dorsal surface not as long as pronotum and mesonotum taken together, declivity concave, with well-marked sides. Scale not so high, narrower, and more pointed at apex, projection beneath petiole, less tooth-like, not so deep, and with a straight surface beneath; gaster more elongate, armed anteriorly with a short, blunt, projecting tooth. Sting long.

Long. 9.5 mm.

Type in B.M. Coll.

 $\circ$ . Very like  $\not \subseteq$  in colour, structure except usual differences, etc.; puncturation slightly stronger, especially of thorax, insect less shining, and the beautiful bluish sheen less evident.

Head longer; mandibles longer and stronger, with teeth more developed; eyes larger; frontal furrow reaching median ocellus. Wings light brown, somewhat iridescent; pterostigma and veins dark brown, one discoidal cell, two long cubital cells closed, and radial cell closed.

Long. 10 mm.

♀ type in B.M. Coll.

Described from two workers and two winged females taken by Miss L. E. Cheesman, Dutch New Guinea,

Cyclops Mts., Mt. Lina, 3500 ft., iii. 1936. In nest in rotten wood.

#### Tribe PLATYTHYREINI Emery.

Platythyrea quadridenta, sp. n.

Ş. Black, extreme apex and base of scapes, funiculi, articulations of the legs, spurs, tarsi, apex of gaster, sting, and masticatory border of mandibles reddish. Dull, clothed with the usual pruinose pubescence, which is distinctly yellowish in colour, and some small scattered shallow punctures and tuft of soft yellow hairs on pygidium.

Head oblong, longer than broad, sides rounded, broadest across eyes, posterior border slightly excised and narrowly margined: mandibles with masticatory border armed with 6 or 7 teeth, the apical one the longest, curved and pointed; clypeus rounded anteriorly, frontal carinæ with a shallow pit or fovea in centre; frontal furrow short, shallow, not very distinct; eyes large, slightly longer than broad; antennæ long; scape extending for about a third of its length beyond posterior border of head, funiculi with all the joints longer than broad, the second joint being the longest. Thorax long, broadest anteriorly, pronotum transverse, convex, sides and anterior border and angles rounded, pro-mesonotal suture fine but very distinct; mesonotum long, narrow, flat above, continuous with dorsal surface of epinotum, separated from the same by a very faint round impression, epinotum armed with two distinct but blunt teeth at posterior angles of dorsal surface, declivity abrupt, concave; node of petiole longer than broad, narrower at apex, convex above, armed with two blunt teeth at apex which are longer than those of epinotum, space between the teeth semicircular, declivity of node concave, gaster rounded anteriorly, narrowed to apex, second segment longer than first. Sting strong. Legs long.

Long. 7·3 mm.

Type in B.M. Coll.

Described from a single worker taken by Miss L. E. Cheesman, Papua, Kokoda, Wharton Range, 1200 ft., v. 1933.

This is a very distinct species, quite different to *P. melan-cholica* Smith from Morty Island and New Guinea, the structure of the epinotum and node of petiole being something after the style of the large African *P. cribrinodis* Gerst., though much more pronounced.

#### Subfamily Myrmicinæ.

# Tribe PHEIDOLOGETINI Emery.

Oligomyrmex (Oligomyrmex) manni, sp. n.

Q. Brownish red, legs and antennæ yellow, teeth to mandibles black, apex of segments of gaster faintly and narrowly yellow; shining, clothed with sparse, moderately long outstanding yellow hairs, more abundant on gaster, and sparse yellow pubescence.

Head longer than broad, subparallel, posterior border excavate, longitudinally striate anteriorly, more strongly on cheeks and front; mandibles robust, armed with 5 teeth. faintly and sparsely punctate and longitudinally striate at base; clypeus rounded anteriorly, smooth and concave between frontal carinæ; frontal area small, smooth, and, shining; eyes large, prominent; ocelli moderate; antennæ 9-jointed, scape short, only reaching median ocellus. Thorax narrow, longer than broad, sides rounded, narrowed to base, broadest before insertion of wings, very faintly and sparingly punctured; epinotum with two short. blunt, triangular teeth, space between somewhat concave. Petiole with pedicel slightly rugosely punctured, node narrow and slightly emarginate above, armed with a short pointed tooth anteriorly beneath; postpetiolebroader than petiole, transverse, faintly rugosely punctured; gaster long, oval, considerably longer than broad. Wings iridescent, one discoidal, one cubital, and long closed radial cell, which is slightly appendiculate at apex.

Long. 5 mm.

Described from four winged females taken by Miss L. E. Cheesman, Papua, Mafulu, Wharton Range, 4000 ft., Jan. 1934.

Type in B.M. Coll.

Considerably larger than atomus Emery from New Guinea and the Solomons and viehmeyeri Mann from the Solomons. Too large for the  $\mbox{$\,\boxtimes\,$}$  of subreptor Emery from

New Guinea. It comes nearest to concinnus Mayr from the Dutch East Indies, but is a little larger and differs in puncturation and structure.

#### Tribe MERANOPLINI Emery.

#### Meranoplus rugifrons Emery.

 $\mathcal{Q}$ . Differs from the  $\mathcal{Q}$  in being larger, darker in colour, and with the sculpture somewhat stronger throughout. The hairiness is similar.

Antennæ slightly thicker in comparison. Thorax robust, besides the usual differences quite unlike that of the  $\nothing$ . Prothorax armed with a strong sharp spine at anterior angles; mesonotum very convex, rounded; scutellum round, prominent; epinotum armed with two slightly curved spines which are longer but blunter than those of the  $\nothing$ . Petiole and postpetiole thicker and broader.

Long. 4.5 mm.

Described from a dealated female taken by Miss L. E. Cheesman in moss in company with a large number of workers, Papua, Mafulu, Wharton Range, 4000 ft., xii. 33.

♀ type in B.M. Coll.

Emery describes and figures the worker, from Moroka, as a subspecies of *Meranoplus spinosus* Smith, but as the latter is not a *Meranoplus* but a *Procryptocerus* [see Donisthorpe, Ann. & Mag. Nat. Hist. (ser. 10) x. p. 456 (1932)] *M. rugifrons* becomes a good species. In the 'Genera Insectorum' Emery gives p. 152 for Smith's *spinosus*, when it should be p. 150.

# Meranoplus sabronensis, sp. n.

☼. Darker or lighter reddish brown, mandibles, antennæ, legs, anterior angles of frontal carinæ, teeth of thorax, and side-rims of gaster yellow, teeth of mandibles and eyes black. Clothed with longer and shorter outstanding yellow hairs. Head transverse, broadest before base, posterior angles rounded, posterior border straight when seen from above, longitudinally striate, anteriorly the striæ being broken up just after frontal area into a network of punctures with raised borders; mandibles armed with four teeth, the apical one long and sharp, somewhat shining, widely longitudinally striate; clypeus with anterior border slightly sinuate, anterior angles pointed, sides with sharp edges, two longitudinal carinæ posteriorly.

slightly concave between, posterior border rounded; frontal area indistinct, shining, triangular; frontal carinæ widely separated, anterior angles pointed; scrobes extending beyond eye by half the eye's length; eyes prominent, longer than broad; antennæ: scape short spindle-shaped, not reaching posterior border of eye; funiculus with very distinct 3-jointed club, last joint longer than the two preceding taken together. Thorax slightly transverse convex, puncturation as on disc of head, sides with widely separated transverse ridges; pro-mesonotum sinuate on each side anteriorly from neck to anterior angles, which are rather sharply pointed, slightly sinuate at sides from anterior angles to middle, where it is broadly excised, followed by a broad blunt tooth, and another sharper one at posterior angles, posterior border almost straight, with two small pointed teeth in middle; epinotum concave, smooth and shining, sides strongly margined, armed with a slightly curved sharply pointed tooth before middle, and a very small blunt tooth projecting forward on each side at base. Petiole wedge-shaped when seen from the side, narrow above, rounded below, sides striate, anterior surface straight, square, smooth and shining, borders margined, posterior surface slanting, longitudinally striate; postpetiole transverse, sculpture as in head and thorax, rounded and convex above, posterior border rounded, anterior border straight, a little higher than petiole. armed beneath with a small blunt tooth projecting forward; gaster convex, heart-shaped above, very finely asperately punctured.

Long. 2.3 mm.

Described from six workers taken by Miss L. E. Cheesman on dry soil of a clearing, Dutch New Guinea, Cyclops Mts., Sabron, 1200 ft., vi. 1936.

Type in B.M. Collection.

This species comes nearest to *M. hilli* and *M. aureolus* Crawley, very small species from Australia, but is abundantly distinct in structure, sculpture, etc.

# Subfamily Formicinæ Lepeletier. Tribe Camponotini Forel.

Camponotus (Myrmamblys) flavocassis, sp. n.

2. Black to blackish brown, shining, mandibles reddish, teeth black, cheeks, clypeus, area between the frontal

carinæ, antennæ, tarsi, outstanding hairs light to darker yellow, palpi, apex of coxæ broadly, trochanters, knees, apex of tibiæ, spines at apex of tibiæ, front and side margins of pronotum narrowly, and base of segments of gaster narrowly white to yellowish white; legs and base of scapes brown. Whole body very finely reticulated; the reticulation takes the form of a fine network on head, fine longitudinal striæ on thorax, and still finer striæ on scale and gaster.

Head subquadrate, slightly narrower anteriorly than posteriorly, posterior border slightly emarginate, posterior angles rounded; mandibles rather thickly punctured and finely striate, armed with 5 teeth; clypeus triangular, transverse, convex, anterior border notched in centre and emarginate before anterior angles, with a few scattered punctures, and broadly carinate in middle; frontal area not very distinctly defined; frontal furrow fine but distinct; antennæ: scapes narrow, curved, broadest at apex. reaching a little beyond posterior angles of head. Thorax short, convex, robust; prothorax transverse, rounded anteriorly, humeral angles distinct, dorsal surface abruptly separated from sides, giving the appearance of a margin; meso-epinotal suture deep; epinotum rounded above, convex, anterior border margined, declivity longer than dorsal surface, abrupt, concave; petiole: scale thin. rounded and narrowest above; gaster straight at base. sides rounded anteriorly and posteriorly. Femora and tibiæ somewhat compressed, transversely striate and punctured.

Long. 6.5 mm.

 $\[ \]$ . Colour, structure, sculpture, etc. as in  $\[ \]$ , but head more narrowed and with only a narrow border of yellow anteriorly; mandibles yellow, teeth black; antennæ and legs longer.

Long. 3·4-4 mm.

Described from four soldiers and three workers taken by Miss L. E. Cheesman in Dutch New Guinea, Cyclops Mts., Mt. Lina, 3500 ft.

Type  $\mathfrak{P}$  and  $\mathfrak{P}$  in B.M. Coll.

This is the first species of the subgenus Myrmamblys to be described from New Guinea. Other species have been recorded from the Philippines, Queensland, etc. It is quite distinct from any of the known species.

Camponotus (Myrmophyma) cyrtomyrmodes, sp. n.

Ş. Black, shining, mandibles, last four joints of tarsi, spurs, and strigils reddish, trochanters brown with lighter base, articulation of antennæ reddish yellow, apex of segments of gaster narrowly, spines at apex of femora, tibiæ, and metatarsi light yellow, very finely reticulated, clothed with short not close decumbant yellow hairs, and sparse scattered, long, outstanding light yellow hairs or bristles.

Head longer than broad, very broad at base, vertex massive and convex, posterior border excised, posterior angles rounded, cheeks straight at sides, concave beneath, the sides of dorsal surface of head between the eye and the posterior angle separated from the ventral surface by an abrupt angle, giving the appearance of a margin; mandibles strong, armed with four sharp teeth; clupeus triangular, transverse, large, convex; frontal area indistinet; frontal furrow fine and narrow, only extending as far as the base of frontal carinæ; clypeal fovea very marked. Thorax convex, narrowed anteriorly and posteriorly, broadest at pro-mesonotal suture, dorsal surface continuous, a slight angle between dorsum and declivity of epinotum; pronotum pointed and margined anteriorly. anterior angles rounded, with very abrupt sides; promesonotal suture distinct; meso-epinotal suture not defined. Petiole short, scale not high, round above and at sides; gaster moderate.

Long. 6 mm.

Superficially very like a worker of a *Polyrhachis* (*Cyrtomyrma*) species.

3. Black, shining, finely reticulated, insertion of the antennæ and articulations of the legs narrowly yellow, wings yellowish, pterostigma and veins brownish yellow.

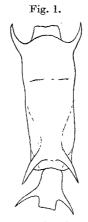
The head is more like that of a Cyrtomyrma, and the genitalia that of a Myrmophyma. The scale not large nor high, and has the stigmata situated on prominences which have the appearance of projecting teeth, sinuate behind these, and then rounded to base, the anterior surface flat, dorsal surface convex.

Long. 5.8 mm.

I can only conclude that this is the male of the above species, though taken on a different date. The reticulation is the same and the decumbent hairs, though more Type and male type in B.M. Coll.

Emery states that there are no constant characters to separate the males of *Polyrhachis* from those of *Camponotus*; so that the fact that this male is very like a *Cyrtomyrma* 3 is not extraordinary. Miss Cheesman took a number of specimens of *Cyrtomyrma* at Mafulu.

#### Polyrhachis (Myrmhopla) arcuspinosa, sp. n.

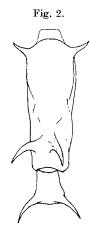


Thorax and petiole of Polyrhachis (Myrmhopla) arcuspinosa, sp. n.

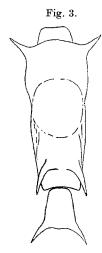
of mandibles edged with black, clothed with grey decumbent hairs, which form a pattern on the gaster, as do those of aureovestitus Donis. (only the hairs are finer), and long outstanding yellowish-white hairs all over the body and appendages; rugose sculpture of head and thorax of a similar character, but coarser than in sexspinosa Latr.

Head longer and narrower than in sexspinosa, the space between the eyes and the posterior border also longer, the posterior angles somewhat more projecting; mandibles shining, with larger and smaller fairly close punctures, armed with 5 strong sharp teeth; clypeus distinctly carinate; frontal area triangular, smaller and less

distinctly defined; the two projections or tubercles on vertex of head less prominent. Thorax with pronotum more convex, and with pronotal spines considerably more



Thorax and petiole of Polyrhachis (Myrmhopla) sexspinosa Latr.



Thorax and petiole of Polyrhachis (Myrmhopla) aureovestitus Donis.

curved inwards; epinotal spines less curved downwards; petiole with spines straighter and also less curved downwards.

Long. 13 mm.

Described from a number of workers taken by Miss L. E. Cheesman in Dutch New Guinea, Mt. Nomo, S. of Mt. Bougainville, 600–1500 ft., "in a carton nest on under side of trees," ii. 36.

Type in B.M. Coll.

This insect comes in the *sexspinosa* group, and near to that species, but is quite distinct, as has been shown in the description and also by the figures. It is also allied to *aureovestitus* Donis., but the sculpture, shapes of spines, etc. are quite different.

# Polyrhachis (Cyrtomyrma) rastellata Latr. var. nomo. var. nov.

Head broad, massive, broader than thorax, cheeks somewhat more rounded than in rastellata, posterior angles not distinct, posterior border not quite as deeply emarginate as in rastellata. Thorax broad, massive, convex; meso-epinotal suture not indicated; scale with four pointed teeth, the outer pair being longer and sharper than in rastellata and the inner pair less close and sharper.

Long. 5-5.5 mm.

Described from a number of workers taken by Miss L. E. Cheesman, Dutch New Guinea, Mt. Nomo, S. of Mt. Bougainville, 600–1500 ft., ii. 36.

This new variety comes in my Group 2, shoulders rounded, and epinotum unarmed (Ann. & Mag. Nat. Hist. (s. 11) i. p. 254 (1938).

#### Tribe LASIINI Ashmead.

Paratrechina (Nylanderia) lecamopteridis, sp. n.

\$\times\$. Light dirty brownish yellow, antennæ and legs lighter; clothed with fine, close, light yellow pubescence and sparse scattered outstanding hairs, somewhat shining, extremely finely punctured.

Head longer than broad, slightly narrower in front

than behind, posterior border excised, posterior angles rounded; mandibles shining, armed with four sharp clypeus transverse, convex, widely rounded anteriorly, subcarinate in centre; frontal area indistinct; frontal furrow replaced by a short carina; eyes rather large, situated before centre of sides of head, with rather coarse facets; antennæ with scape not extending beyond posterior border of head by more than one-fifth of its length, funiculus with 2nd, 3rd, and 4th joints as broad as long, last joint long, pointed, somewhat compressed, longer than the two preceding joints taken together. Thorax short, convex, slightly constricted in middle; pronotum transverse, anterior angles rounded; mesonotum with anterior border rounded: meso-epinotal suture very marked; epinotum with very short dorsal surface, declivity long and concave; scale of petiole small, narrow, inclined forward; gaster slightly longer than thorax, sides rounded, anterior border excised.

Long. 1.6-1.8 mm.

Described from a number of workers taken by Miss L. E. Cheesman in the rhizome of a fern (*Lecamopteris* sp.), North-West Dutch New Guinea, Waigeu Is., 2500 ft., iv. 1938.

Type in B.M. Coll.

This species comes nearest to P. (N.) minutula Forel, but differs in the length of the scape and in other structural characters.

It is difficult to understand why Forel, when describing P. (N.) atomus from the Bismarck Archipelago [Mitt. Zool. Mus. Berlin, ii. p. 25 (1901)], should have described minutula, in a foot-note from New South Wales, and treated atomus as a race of that species. According to the characters he gives I should consider atomus to be a good species; it is smaller, the colour is different, and the length of the joints of the antennæ are not the same.

#### Paratrechina (Euprenolepis) nuggeti, sp. n.

Large \(\xi\). Brownish yellow, gaster darker, antennæ and legs yellow, funiculi, palpi, and tarsi lighter, whole body including head shining, furnished with outstanding blackish hairs or bristles, which are numerous though not close, not present on the epinotum and petiole, the funiculi, palpi, and last joints of the tarsi clothed with fine light

yellow pubescence and short decumbent hairs. There are no decumbent hairs or pubescence on the gaster or apex of scapes and tibiæ, as in Viehmeyer's P. (E). Head finely reticulated, rest of body smooth and shining.

Head about as broad as long, and almost circular when seen from above in the largest \( \), getting slightly longer as the \( \frac{\psi}{2} \) decrease in size, slightly narrower anteriorly posteriorly, posterior border slightly excised; mandibles long, armed with six sharp teeth, the apical one longest, the 2nd and 4th being smaller than the rest, the latter smallest of all; clypeus transverse, convex; frontal area and furrow indistinct; antennæ with scape extending beyong the posterior border of the head by half its length; 2nd joint of funiculus about two and a quarter times as long as broad, 3rd and following joints about three and a half times as long as broad. Thorax long, narrowest at base of mesonotum; pronotum narrowed anteriorly, sides rounded; mesonotum a little longer than broad, rounded, convex; metanotum about a quarter as long as mesonotum; epinotum convex, rounded, angle between dorsal surface and declivity not marked, not higher than pronotum; scale of petiole long, inclined forward, slightly excised on its upper edge; gaster oval.

Long. 4.2 mm.

Small  $\nothing$ . Colour, sculpture, outstanding hairs, pubescence as in large  $\nothing \nothing$ . Head slightly longer in proportion to its breadth than in the latter; it is certainly not much longer than broad, as in Viehmeyer's helleri; as broad anteriorly as posteriorly.

Long. 3.7 mm.

Described from a number of workers taken by Miss L. E. Cheesman in Papua, Kokoda, 1200 ft., ix. 33, and Mafulu, Wharton Range, 4000 ft., xii. 33. The latter were nesting in a clay bank, with a carton tunnel along a root.

Type in B.M. Coll.

This species comes nearest to Viehmeyer's P. (E.) helleri [Arch. f. Naturg. lxxix. Heft. 11, p. 41 (1913)], but differs from it in structure, pubescence, etc.

Named after Miss Cheesman's Papuan collector, "Gold Nugget."